

ISDN's days are numbered: What should you do?



With BT Wholesale having announced that from 2020 you will no longer be able to purchase ISDN and PSTN circuits as it targets a 2025 switch off date, questions are naturally being asked. Will BT really flick the switch in 2025? What needs to be in place before that can happen, and what are the options for those currently on ISDN/PSTN circuits?

Last year, BT boldly announced its intentions to switch off its PSTN and ISDN networks by 2025. This was a smart move. In a world that is fast embracing IP as the standard protocol for all communications services, it was important for BT to declare its intentions to remove the legacy from its network, while giving customers a whole decade to make the switch (if they haven't done so already).

What does this announcement really mean?

Let's start by looking at what PSTN and ISDN really are. PSTN stands for 'Public Switched Telephone Network'. This is the same phone line most people have at home, whereby analogue voice data flows over circuit-switched copper phone lines. While it may have evolved over the years, PSTN is a very, very old technology, operating on the same fundamental principles as the very first public phone networks of the late 19th Century. It is worth noting that PSTN does not just power voice, as ADSL and FTTC both operate on it. As of yet, BT have not suggested any replacement technology for these, so one can assume that BT's planned obsolescence of PSTN applies to voice only in this instance.

ISDN, by contrast, is a spritely young thing from the late 1980s. ISDN, or 'Integrated Services Digital Network', allows both voice and data services to be delivered over digital lines simultaneously. When it launched, ISDN was well suited to businesses, as it could support early video conferencing systems at the same time as an analogue phone line. For a time, it could also offer the fastest internet access available (128 kbps). Naturally, since ISDN is no longer the place to go for video conferencing or a fast internet connection, its USP has quickly been eroded.

So, BT is killing old tech. What is the 'new' tech that is replacing it?

In a nutshell, BT is moving its entire voice network to VoIP (Voice over IP). VoIP is hardly 'new', but this is a good thing. VoIP has been a proven platform for voice for a few decades now. It works. If your business has renewed its telephony sometime in the last few years, you may have been told about it (but don't be surprised if you haven't, since IP is a whole new game that has been growing steadily in the background, with more and more businesses realising the benefits demonstrated by the early adopters).

VoIP has many advantages over PSTN and ISDN too; it is much quicker to provision new lines, you can reduce your line rental due to needing fewer physical lines, and it is vastly scalable and flexible – for example you can redirect calls to different parts of the country at the flick of a switch, or have a single phone number follow you around the world irrespective of where you're working.

Why is BT flicking the switch?

Why do you no longer use your Nokia 3210? Same reason, but on a much bigger scale. Also, maintaining multiple legacy networks is very expensive for BT. By converging all services – voice, data, video and even broadcasting – to the IP protocol, BT only has to maintain one network, not several.

It is also worth bearing in mind that 2025 might not be Doomsday for ISDN. This date is not set in stone. It is BT's intention to stop selling PSTN and ISDN by 2020 and shut it down completely by 2025 – but this is assuming it has managed to switch all customers over to IP services before then.

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This means that a viable alternative must be available to everyone well before 2025. For many businesses today, ISDN is still the best they can get. According to Ofcom, there are 33.2 million fixed landlines in the UK (including ISDN), and approximately 7.6 million of these belong to businesses. BT will not turn them off before they have an alternative firmly in place.

What should you do?

Businesses will no longer be able to buy any systems that use PSTN or ISDN by 2020. While 2025 may seem a long way off, 2020 is only three years away. If your current traditional telephony contract is up for renewal within the next few years, now is the time to start exploring the benefits of VoIP and SIP technologies.

Assuming you are in an area that can purchase a VoIP system, there are two things you need to consider:

- **Is your internet connection good enough to deliver VoIP?**

While VoIP does not use very much data when compared with other services like video, you must ensure you have enough bandwidth to deliver voice on top of everything else your office does. Some say you need 5Mbps down and 2Mbps up as a bare minimum for a small office, but really the bandwidth you need depends on your individual needs and Quality of Service (QoS) priorities. Bottom line; if you don't have enough bandwidth or a QoS commitment, you could experience poor audio quality or intermittent service and miss out on the full benefits.

- **Does your office phone system support VoIP?**

Most new office phone systems already support VoIP, but if yours doesn't, you can either replace your entire phone system with an IP one (worthwhile if your handsets are looking tired), or just invest in an IP-enabled on premise PBX (the box that connects your internal phone system to the external phone network). A hosted telephony system is also a good way to make the switch.

Is it ever worth buying ISDN today?

Given all of the advantages of VoIP over ISDN, in most cases we would recommend investigating whether VoIP is right for your business, and if not now, considering how you will make the move over in a few years' time. And there are still some circumstances where ISDN is a good solution, for example as a disaster recovery or failover option.

Whether or not the 2025 date will stick remains to be seen. The final date is dependent on how successful UK fibre rollouts are, as without the connectivity to run, there is no real alternative to ISDN.

Connectivity in the UK is getting faster and faster, so who knows it may happen even sooner than 2025. But while the date may move by a few years here or there, the one certainty is this; ISDN and PSTN are outdated technologies that are simply not as good as modern VoIP.

So don't stay in the past. Let's embrace the future together!

Lorin White
Managing Director

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